



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10**

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ENFORCEMENT &
COMPLIANCE ASSURANCE
DIVISION

Inspection Date(s): July 16, 2019

Regulatory

Program(s): SIP, PSD, TV Permit, NSPS, NESHAP

Company name: BP Exploration (Alaska) Inc.

Facility Name: Gathering Center #2

Facility Physical Prudhoe Bay, Alaska

Location: Section 16, Township 11N, Range 13E, Umiat Meridian

Mailing Address: 900 E. Benson Blvd.

P.O. Box 196612

County/Parish: Anchorage, AK 99519-6612

Facility Contact: Rachel Buckbee, Air Quality Compliance Advisor

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AFS Number: AK0000000218500005

Permit Number: 183TVP01

NAICS: 211111 - Crude Petroleum and Natural Gas Extraction.

SIC: 1311 - Crude Petroleum and Natural Gas

Attendees:

Facility Representatives:

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Scott Cananiss, GC2 OSM, (907) 659-4902

Scott Brown, GC2 Facility PTL, (907) 659-4916

David Spall, GC2 Field PTL, (907) 659-5934

Ken Miller, Environmental Advisor, (907) 659-4789

Robin Glover, Air Advisor, (907) 564-5295

Geoffrey Kany, Environmental Team Lead, (907) 659-5196

Kimberly Finkle, WOA Field Maintenance Team Lead, (907) 659-4841

Terry Wolfe, Becht Engineering, OGI Job Rep, (907) 659-5678

EPA Inspectors:

John Pavitt, EPA, Region 10, ECAD, ATES, (907) 271-3688

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State Inspector(s):

Breanna Howard, AK DEC, Fairbanks Office, (907) 451-3189

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EPA Lead Inspector
Signature/Date

 8/30/19
 John Pavitt, R10, ECAD, ATES Date

EPA Inspector
Peer Review
Signature/Date

 8/30/19
 Christopher Williams, OECA, AED Date

Supervisor
Signature/Date

 9/4/19
 Katie McClintock, R10, ECAD, ATES Section Chief Date

I. Introduction

The United States Environmental Protection Agency (EPA) and Alaska Department of Environmental Conservation (ADEC) inspected BP Exploration (Alaska) Inc., Gathering Center #2 (GC#2 or the "facility") to verify compliance with applicable State and federal regulations under the Clean Air Act (CAA). On July 3, 2019, the EPA notified the facility by phone and email of the CAA inspection to be conducted on July 16, 2019. This email is attached to this report (Attachment 1). The inspection was focused on compliance with New Source Performance Standards (NSPS) Subpart OOOOa – Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced After September 18, 2015. GC#2 is an existing facility which became subject to the rule when it was modified or reconstructed after September 18, 2015.

A. Summary of the Facility

BPXA GC2 is an oil and gas production facility in the Greater Prudhoe Bay (GPB) field, Alaska. The SIC code for this facility is 1311, Crude Petroleum and Natural Gas Production. The NAICS code of this facility is 211111, Crude Petroleum and Natural Gas Extraction. The facility has a processing pad which processes crude oil production fluids received from Well Pads H, J, M, N, Q, R, S, U, W and Z.¹ Production fluids are processed to remove hydrocarbon gas and water from crude oil. Hydrocarbon gas is dehydrated and compressed for reinjection into the reservoir or used as fuel. Water is processed to remove oil before injection into disposal or injector wells.² Crude oil is sent from GC#2 via pipeline to the Trans Alaska Pipeline, joining all oil from Alaska North Slope fields for transport to Valdez, Alaska. According to the facility's Title V permit Statement of Basis, the facility is a major source for nitrogen oxides (NOx) and carbon monoxide (CO) and a minor source for hazardous air pollutants (HAPs). The highest individual HAP is formaldehyde with an emission rate of less than 4 TPY.

¹ As described in the facility's Air Permit Emission Unit Inventory, Attachment 2. Additional well pads may also send fluids to the production pad.

² Title V Permit No. AQ0183TVP01, Revision 2, Statement of Basis

The facility's Title V air permit was issued on October 20, 2003 and was scheduled to expire November 26, 2008. The permit has been revised three times and the facility operates under an application shield. NSPS Subpart OOOOa was promulgated after the permit was issued and the permit does not identify Subpart OOOOa as an applicable requirement. On December 27, 2019, BPXA applied to the State for a permit modification to disaggregate the above 10 Well Pads from the permit. (Attachment 3) As stated in the request, the intent of disaggregating the well pads is to "treat each well pad and the production pad as separate stationary sources." To date, the State has not acted on the facility's disaggregation request.

B. Compliance History

A review of EPA's database, Enforcement and Compliance History Online (ECHO)³ shows compliance history at the facility which is unrelated to NSPS Subpart OOOOa. In general, ECHO records show that in the five years prior to the inspection the facility had submitted Annual Compliance Certifications (ACC) as required by the Title V permit and the CAA and that ADEC has conducted on-site inspections of the facility every two years. ADEC took four informal enforcement actions in that time, which were warning letters for excess opacity from emergency flares located at the GC#2 production pad, unrelated to Well Pad operations.

The most recent ACC submitted by the facility to EPA R10 and ADEC (calendar year 2018), does not address NSPS Subpart OOOOa. Permit 183TVP01 does not identify Subpart OOOOa as an applicable requirement and does not include permit terms or conditions to demonstrate compliance with the subpart.

C. NSPS Subpart OOOOa Annual Reports

BPXA submitted NSPS Subpart OOOOa Annual Reports to EPA as required by 40 CFR §60.5420a(b), with a cc to ADEC. The reports are comprehensive; they include information on multiple facilities in the GPB area.

- The *Initial Report*, dated October 30, 2017, starts with the initial compliance period, August 2, 2016, and runs through August 2, 2017. (See Initial Compliance Report requirements, §60.5410a.) The report had the following information:
 - It describes monitoring activities at well affected facilities, and inspections/repairs of fugitive emission leaks at well sites.
 - Describes hydraulic fracturing/refracturing at five well sites.
 - Covers 38 sites overall in the GPB area, eight of which (21%) send fluids to the GC#2 facility.
 - Counted 126 leaking components at GC#2 well sites out of 363 overall in the GPB area which were placed on a delay-of-repair schedule. This represents 35% of the total leaking components on delay-of-repair in the GPB area. The report

³ See <https://echo.epa.gov/>

stated repairs were delayed because they would require a well shutdown or well shut-in.

- Identified deviations from the facility's monitoring plan:
 - Initial monitoring not completed by 6/3/17⁴
 - Repair dates were not recorded
 - Repairs were not conducted w/in 30 days of discovery
 - Repair methods were not recorded
 - Items on delay of repair not repaired during the next planned shutdown;
- The 2018 Annual Report, dated October 29, 2018, covers the time period August 3, 2017 through August 2, 2018. (See Reporting Requirements, §60.5420a(b).)
 - It describes monitoring activities at well affected facilities, and inspections/repairs of fugitive emission leaks at well sites.
 - Describes hydraulic fracturing/refracturing at seven well sites.
 - Expanded to cover 44 sites in the GPB area, nine of which (20%) send fluids to the GC#2 facility.
 - Counted 44 leaking components at GC#2 well sites out of 176 overall in the GPB area, which were put on a delay-of-repair schedule. This represents 25% of the total leaking components on delay-of-repair in the GPB area. The report stated repairs were delayed because they would require a well shutdown or well shut-in.
 - Identified deviations from the facility's monitoring plan:
 - Not documenting monitoring survey times, weather conditions, or instrument details;
 - Not recording a daily verification video or site photo;
 - Initial repair not performed w/in 30 days of discovery;
 - Resurvey not performed w/in 30 days after repair;
 - Additional repair attempts not recorded;
 - Items on delay of repair were not repaired during the next planned shutdown;
 - Repair notes not recorded;
 - Repair dates not recorded;
 - Repair methods not recorded.

⁴ See Final Rule, 6/3/16 Federal Register: "You must conduct an initial monitoring survey within 60 days of the startup of production...for each collection of fugitive emissions components at a new well site or by June 3, 2017, whichever is later." (40 CFR 60.5397a(f)(1)) BPXA states in the *Initial Report* that they missed this deadline because of "uncertainties created by the 90-day stay that was vacated by the courts."

II. On Site Inspection

Opening Conference

I arrived at the BPXA, GC#2 facility's "crow's nest" office trailer, along with ADEC inspectors Howard, Mallinger and Morison shortly after 8:00 am on July 16, 2019 for an announced inspection. We met with nine company representatives at the Opening Conference. The State inspectors and I presented our credentials to Rachel Buckbee, BPXA Air Advisor and informed her that this was a joint State/EPA inspection with EPA lead to determine compliance with regulations under the Clean Air Act. The company representatives also introduced themselves and I passed around a sign-in sheet (Attachment 4).

I said the scope of the inspection was to check on compliance with New Source Performance Standards (NSPS) Subpart OOOOa. I said even though that was the focus, we would keep our eyes open and make note of any other potential air compliance issues we might come across as we carried out today's inspection. I said that a second EPA inspector, Chris Williams from HQ, was delayed getting into the Deadhorse airport, and I would leave the site to go pick him up sometime around 9:30 am.

I said our inspection would involve going to one or more well pads to check for methane and VOC leaks, using an FLIR infrared camera and a photoionization detector (PID).

I asked about any work/projects being done at the well pads. Were there any projects taking place that would affect our ability to get out there and look at equipment? The facility representatives said they were in the "pre-TAR" stage, meaning they were preparing for a turnaround of GC#2. They said that when the turnaround starts next month, they will use that time to repair VOC and methane leaks from the equipment on their delay-of-repair schedule. They said Terry Wolfe with Becht Engineering would be able to take us around. Terry would be the Performing Authority (PA) for the day, they said.

I said I had reviewed information in their file in advance of the inspection and had several comments and questions. I said the Title V permit emission unit inventory (Attachment 2) includes 10 well pads, but I understood BPXA had requested that the well pads be disaggregated from the permit. I asked if that was their plan. Ms. Buckbee said that was right, they requested the change early this year and she would send me a copy of their correspondence with the State. (Attachment 3)

I said the emission unit inventory has a footnote saying that there are no stationary sources on the well pads. (Attachment 2) I asked if that was correct. For example, do the pads have emergency engines or pumps? The facility representatives said Z-Pad has a heater, but that was it. They said that well pads on the West Side of the Prudhoe Bay field don't have emergency generator sets or pumps.

I pointed out the storage tank inventory which is listed in the Permit Shield section of their permit (Table 4 – Permit Shields Granted). I asked if any of the several dozen tanks listed in the table store crude oil. The facility representatives said they store chemicals, not oil.

The Permit Shields Granted section of the permit also states that three federal air rules related to oil and gas facilities do not apply to GC#2, and I asked the facility representatives if that was still correct because the permit is almost 16 years old and things may have changed. The three rules, and the reason for non-applicability as stated in the permit are:

Table 4 – Permit Shields Granted (excerpt)

40 CFR 60 Subpart KKK – Standards of Performance for Equipment Leaks of VOC from Onshore Natural Gas Processing Plants	Facility is not a natural gas processing plant as defined in subpart.
40 CFR 60 Subpart LLL – Standards of Performance for Onshore Natural Gas Processing Plants	Facility does not operate natural gas sweetening unit(s).
40 CFR 63 Subpart HH – National Emission Standards for Hazardous Air Pollutants from Oil and Natural Gas Production Facilities	Facility not a major source of HAPs as defined in 40 CFR 63.761. Black oil exemption applies; facility exclusively processes, stores, or transfers “black oil” (defined in the final promulgated rule as a petroleum liquid with an initial produced gas-to-oil ratio [GOR] less than 1,750 scf/bbl and an API gravity less than 40 degrees).

The facility representatives said the exemptions still apply and the facility is not subject to the rules. I said my understanding of North Slope crude is that H₂S has been increasing over time and asked if that has led them to install a sweetening unit. Ms. Buckbee said they use “scavenging units” to remove H₂S but not a “sweetening unit.”

Regarding the facility’s Subpart OOOOa Annual Compliance reports, I asked if they were continuing with an August-to-August reporting schedule, or changing to a calendar year schedule, as some other facilities in Alaska have done. Ms. Buckbee said they were fine with the current reporting schedule and weren’t changing.

Regarding opacity from flares at GC#2, I said that the State issued four Warning Letters to the facility in 2015 and 2016 for excessive opacity (black smoke), in violation of Alaska’s air quality regulations. I asked what was causing black smoke from flares? The facility representatives said that they’ve had “integrity issues” with horizontal flares, and a problem with moisture and ice formation in vertical flares. They said that they planned on correcting these problems during the upcoming TAR, for example, by replacing valves. Scott Brown, the facility PTL, said that they’ve “proven that certain valves are leaking” and need to be replaced. They said the

turnaround was scheduled to start around August 15th and would run about 14 days. After that, they said, it may take another week or so to get things up and running back to normal. They Well Pads will also be shut down during the TAR, they said. This includes the 10 pads listed in the Title V permit, plus Pads L and V, they said. Wells are depressurized during a TAR, Ms. Buckbee said.

III. Process Overview

Mr. Terry Wolfe, with BECHT Engineering gave us an overview of the facility's fugitive emissions monitoring program. Mr. Wolfe said he heads up the team that does the monitoring and helped design the program. He said the monitoring documentation starts with checking the weather conditions. Wind over 10 mph and sunny weather are problems, but rainy days are OK, he said. He said they do a daily calibration of their Optical Gas Imaging (OGI) camera with a *Bic* (butane) lighter. When they find a leak, they put a bar code on the leaking component and put the data in their database, and then use a *Pocket PC* to access the data in the field. He said they have a ranking system, on a scale of 1-to-5 (5 being the worst leak). He said they also bring a 4-gas meter with them while monitoring for fugitive emissions leaks. Mr. Wolfe said they have three technicians in addition to himself and his alternate, and they monitor BPXA facilities across the whole Western Operating Area. In addition to the OGI monitoring they do annually, Mr. Wolfe described two other parts to their program: they have a truck-mounted OGI camera operated by security personnel daily who use the camera on their daily rounds across the field, plus the OGI technicians do a quarterly inspection of the skids on well pads. He described the quarterly inspection as a quick check to look for leaks inside of skids, for fire and explosion safety concerns.

Mr. Wolfe continued his description of their fugitive emissions monitoring program. He said their surveys include taking videos and photos to document where they were each day. When they find a leak, he said, they create a Work Order in the MAXIMO System. Those orders go to planners, who look at the information and schedule repairs.

I asked what causes them to put a repair on a delayed schedule? Mr. Wolfe said that decision is made for safety reasons. He said leaking components can't be fixed until the equipment is depressurized.

[Break: I left the facility at 9:40 am to drive to the Deadhorse airport and pick up EPA inspector Chris Williams. EPA Inspector Williams and I returned to the crow's nest office trailer at 11:00 am. While I was gone, Mr. Wolfe gave a demonstration of the facility's fugitive emissions recordkeeping system.]

At 11:00 am, Inspector Williams and I walked into the crow's nest conference room and joined the meeting in progress. Inspector Williams introduced himself to the group. Mr. Wolfe gave a quick recap of the demonstration of their tracking system. His recap for us included showing us the forms they fill out when they find a leak. He said technicians fill out a paper checklist, then record the data onto a spreadsheet. They prepare a "Thermal Trend" database with this information, he said.

He said they do a “bubble check” after a repair has been made, to verify a leak has stopped.

Mr. Wolfe said they make a “severity ranking” for each leak, on a scale of 1-5 (low-to-high). EPA Inspector Williams asked if their ranking system was proprietary or Confidential Business Information (CBI). Ms. Buckbee said no, it wasn’t. I said that the facility can claim any information we discuss, records we review or photos we take during the inspection as CBI. I said that any information that the Facility deemed to be CBI should be marked as such and it would be handled as CBI according to EPA’s CBI procedures. Ms. Buckbee said they only information she thought might be CBI would be the names of the operators who do their surveys, as identified in Annual Reports submitted to EPA.

Mr. Wolfe gave us an example of a permanent bar code tag, plus a temporary, paper tag he said they use to mark leaking components. The tags are clear and easy to read. The metal tag has a bar code, with words stamped onto the tag: “BPXA OGI PROGRAM, DO NOT REMOVE, REGULATORY COMPLIANCE.” The paper tag has the words printed on it: “OPTICAL GAS IMAGING, FUGITIVE EMISSION.” It leaves space for writing comments, the date, the Item #, and to write an OGI severity ranking. (Attachment 5)

Mr. Wolfe said that the *Pocket PC* allows him to access videos and photos of each leak location along with the date and notes about what’s occurred at the location. He said it’s intrinsically safe so it can be carried anywhere the operators go. The data is color-coded, he said. Red means it’s a current leaker; yellow means it’s been repaired, and green means it never had a leak.

Mr. Wolfe said he had a hot work permit for our site visits to any of the pads today.

Before ending our entry meeting, we had a Toolbox Talk with the facility representatives to review safety issues. The facility representatives informed us about slip/trip/fall hazards that could be present in all locations and reminded us to use handrails. They said the pre-TAR work going on this week might have workers and equipment staged in various locations we visit and to watch out for their activities. Mr. Wolfe said he would talk to Pad Operators when we entered pad work areas.

We took a lunch break from 11:30 am – 12:30 pm before going out in the field.

IV. Plant Tour/Walkthrough

The EPA and ADEC inspectors visited two well pads during the inspection (W-Pad and N-Pad), accompanied by facility representatives. Each site is identified as a Collection of Fugitive Emissions Components at a Well Site, in the Subpart OOOOa Annual Compliance Report submitted by BPXA.

At each site visited, the inspectors obtained photographs of the entrance signage and facility equipment (see the photolog in Attachment 6). The inspectors made auditory, visual, and olfactory (AVO) observations, including OGI (see the video log in Attachment 7), as well as photo-ionization detection (PID) observations to document the conditions of and any emissions originating from the well sites.

During the facility inspection, I wrote down observations in a notebook and took photographs, as other Inspection Team members used instruments to check for leaks. Inspection Team members used the following equipment:

- EPA Inspector Williams operated an optical gas imaging infrared (OGI) camera manufactured by FLIR, Model GF320, serial number 44401085 (EPA Tag ID: C10103) to record videos of emissions sources using the visible light mode, the high sensitivity IR mode (HSM), and the fully automatic IR mode (Auto).
- ADEC Inspector Morrison operated a PID to measure volatile organic compound (VOC) concentrations (excluding methane, ethane, and propane) in air. The PID, manufactured by Rae Systems, Model ppbRae3000, serial number 594-901619 (EPA Tag ID: B12349).
- I took digital photos with a Panasonic Lumix, DMC-TS30 camera, serial number WL8GD003184.

The FLIR and PID were calibrated prior to the field inspection and the calibration records are stored at a centralized location in OECA's Office of Civil Enforcement (OCE), Air Enforcement Division (AED) offices located in Washington, D.C.

A. W-Pad

Weather: temperatures in the mid-60's, overcast. Wind 7 mph.

We arrived at this site at 1:10 pm. W-Pad Operator Michael Newman met us on site and said that they had workers on site today using earth-moving equipment, dealing with subsidence issues on the pad. Our other escorts were Rachael Buckbee, BPXA, Geoff Kany, BPXA and Terry Wolfe, Becht Engineering.

The PID showed a VOC concentration of 0.00 ppm in the general pad area, away from the wells and manifold building.

We entered the Module 500 Building. This U-shaped building is elevated from the ground and divided into sections. We entered the module through the 501c area of the module and walked through the entire building.

Safety Note: this module has numerous pipes, handles and other items sticking out at eye-level. Eye protection was worn by everyone in this area.

Existing leaks on a delay of repair schedule were found to still be leaking and were checked to confirm they were tagged as leaks. When new leaks were found by EPA and State inspectors, they were pointed out to facility representatives. (See Attachment 7, Video Image Log).

Leak Description No. 1 Module 501	Existing VOC leak on top plate of a Daniel Orifice.
Video file	MOV_0547
PID reading	0.15 ppm.
Tag	Tag #15933 (metal tag w/ bar code plus a dated, paper tag). (Date not captured in notes.)
Photo file	P1000063

Leak Description No. 2 Module 501	Existing leak on pipe connection.
Video file	MOV_0548.
PID reading	0.4 ppm
Tag	Tag #10181 (metal bar code plus paper, temporary tag dated 10/4/18).
Photo file	N/A

Leak Description No. 3 Module 501	Existing leak on top plate of a Daniel Orifice.
Video file	MOV_0549
PID reading	1.8 ppm.
Tag	Tag #10759 (metal bar code plus paper, temporary tag).
Photo file	P1000063

Leak Description No. 4 Module 501	New leak, identified on pipe flange with prior history.
Video file	MOV_0550 and _0551
PID reading	9.53 ppm
Tag	Permanent Tag #12022 (metal bar code); the operator added a fresh paper tag to document the new leak.
Photo file	N/A
Comments	Mr. Wolfe demonstrated with his Pocket PC that he could call up the history of this location. He said it had been repaired 3 times previously. Mr. Wolf measured an LEL of 4% at the time of the inspection.

Leak Description No. 5 Module 501	New leak, on valve stem with prior history.
Video file	MOV_0552 (before repair) MOV_0555 (after repair)
PID reading	1.85 ppm.
Tag	Permanent Tag #4005 was already placed on this location. An operator was called to the site and was able to immediately repair this leak by greasing the component. Therefore, no additional tag was applied.
Photo files	P1000065 and P1000066

Comment	Leak discovered by State Inspector Morison by smell.
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Leak Description No. 6 Module 501	Existing leak on top plate of a Daniel Orifice.
Video file	MOV_0553.
PID reading	0.05 ppm
Tag	Permanent Tag #11343 (metal bar code plus paper, temporary tag, dated 10-4-18).
Photo files	N/A

Leak Description No. 7 Module 501	New leak, on top plate of a Daniel Orifice. Location referred to as a "dead leg" by operator.
Video file	MOV_0554.
PID reading	3.00 ppm
Tag	Tag #14850 was placed on this location.
Photo files	P1000068

We walked out of the Module 500 Building at about 14:50. Winds were varying, from about 2 – 10 mph. Cariboo were walking across the W-Pad and we waited for them to walk away before going further. Mr. Kany, BPXA, said that he had some information that EPA Inspector Williams had ask for earlier in the day. He said he a call from BPXA Environmental Advisor Ken Miller, who confirmed that the crude oil processed at GC#2 has an API that can range from of 20 – 36 but is "typically 24 – 28 at most wells," he said.

We examined Well W-25, which was shut in. We did not find any leaks inside or outside of the well housing using OGI or PID. PID readings were 0.00 around the well. Mr. Wolf said their routine inspection includes checking the wells inside housing, pipes and valves connect to wells on the well pads. (Photos P100069-71). He said nothing was currently open on any well houses, but some are open on the back side of well houses, for gas lift lines. Using the OGI to briefly scan the general area, we did not find any leaks on the back sides of wells.

We examined Well W-26, which was operating. We did not find any leaks inside or outside of the well housing using OGI or PID. The PID was displaying 0.00 inside and outside the well housing. The facility representatives said the pressure of gas lift lines in this area was 1,400 psi. They said the pressure of oil lines (three-phase, coming out of the ground) was 250 psi. We left the W-Pad at about 15:30.

B. N-Pad Site

We arrived at N-Pad at about 15:55. We were escorted by facility representatives Kany, BPXA and Wolfe, Becht Engineering.

Module 54

We continued our inspection by entering Mod 56N and passed through it to reach Mod 54 to check for fugitive emissions leaks which had already been tagged and repaired, and to check for

new leaks. ADEC inspector Morison continued to monitor with a PID and EPA inspector Williams continued to do so with an OGI camera.

Mr. Wolfe pointed out two locations which had previously been tagged and then repaired in June 2018. We found that these two components were not leaking at the time of the inspection. (The repairs were working.) The permanent Tags (with bar codes) for the components were # **14822** and # **14823**. We also checked Tag # 14836 in this area. The PID reading was 0.00 ppm. No leak was detected with the OGI camera.

Damaged Suspect Asbestos Materials Observed.

On the 5th floor of Mod 54, I saw damaged pipe insulation on pipe elbows in two locations, which looked like suspect asbestos-containing materials based on my training and experience. I pointed them out to the facility representatives and took pictures for later reference. (Photos P1000075 – 78), One damaged pipe insulation area was located adjacent to equipment item no. HVA-N-7740 and the other was adjacent to no. HVA-N-7738.

Skid 66

At 16:40, we went to Skid 66, which the facility representatives said is used for the purpose of gas lift. Mr. Wolfe said that several components were on delay of repair here. Here, we found a new fugitive emissions leak, identified by smell. Mr. Wolfe tagged the location and measured a LEL of 16% at 4 inches from the leak. He assigned it a hazard ranking of 1. A gauge for the equipment showed it was a pressurized line, with a reading of 1900 psi.

Leak Description No. 8 Skid 66	New Leak, of bolt beneath plate.
Video file	MOV_0556
PID reading	14.85 ppm
Tag	Tag # 11664. New tag attached at the time of the inspection.
Photo files	P1000079 - 81

We also checked additional tagged equipment and confirmed that none of the following were leaking:

- **Tag # 17773.** Dated 9/23/18. Mr. Wolfe said he had no record of a repair. No leaks were detected at the time of inspection. (See Photo P1000081)
- **Tag # 4054.** This one was closed out with a permanent tag attached. No leaks were detected.
- **Tag # 4596.** This one was closed out with a permanent tag attached. No leaks were detected.

Well House N-15

At Well House N-15 we checked for leaks. The well was operating and hot to the touch. The PID was showing a VOC concentration of 0.00 ppm from outside and inside the well house. The OGI camera did not show a leak at this location. There were no odors indicating a leak at this location.

We departed the N-Pad at 17:15 and drove back to the GC#2 Crows Nest office trailer for an exit meeting.

V. Records Review

The inspectors did not request records in advance of the inspection. I requested a copy of the facility's *Well Site Fugitive Emissions Monitoring Plan* and was given a copy during the exit meeting. (Attachment 8)

VI. Closing Conference

Our closing conference to review the inspection with facility started at 15:25. (See Attachment 4 for the meeting sign-in sheet.)

I described our observations at W-Pad and N-Pad today. At W-Pad we found 3 new fugitive emission leaks which were promptly tagged by their operator and verified 4 existing leaks on delay of repair were still ongoing and needed repair. At N-Pad we found one new leak. We also checked one tagged component that is on a delay of repair and found it was not leaking today. I gave the tag numbers for each location we found to be leaking.

I described the damaged pipe insulation which I identified as suspect asbestos-containing material at W-Pad today and recommended that the facility sample the material to confirm whether it is asbestos or not and repairing it appropriately.

Mr. Wolfe with Becht Engineering briefly described their overall tracking system for fugitive emissions monitoring, starting with a blank form, to work orders, through the final, completed repairs. EPA Inspector Williams asked if they ever use Method 21 to identify leaks and to verify repairs. Mr. Wolfe said they do not; they only use OGI cameras.

I said that our inspection won't be over until we write an inspection report. I said I would send a records request to Ms. Buckbee as part of this inspection.⁵ The records I'll be requesting concern their historical monitoring activities at the two well pads we visited today. EPA Inspector Williams asked for a copy of the facility's severity ranking system, and for information on the crude oil API. Ms. Buckbee said she'd send that information to him.⁶ I asked if the facility representatives had any questions for the inspectors, and they did not.

We left the facility at 18:00.

VII. Areas of Concern

At the closing conference, I said that at this time I had not identified compliance concerns. However, that could change as I review their records and complete my report.

⁵ I sent a records request to BPXA on 8/2/19, asking for records by 8/16/19. BPXA requested a short extension which I agreed to, and I received a response on 8/19/19.

⁶ This information was sent via email to EPA Inspector Pavitt on 7/18/19 and was forwarded to EPA Inspector Williams.

VIII. List of Attachments

1. Email correspondence to Rachel Buckbee, BPXA Re: EAP/ADEC Air Compliance Inspection, BPXA, GC2.
2. Permit AQ0183TVP01 Emission Unit Inventory.
3. Letter, dated 12/27/18, BPXA to ADEC. Re: Gathering Center #2, Permit Minor Modification Application, Well Pad Disaggregation.
4. Inspection Entry and Exit Meeting sign-in sheets.
5. OGI Tag and Bar Code examples.
6. Digital Photo Log and Photos
7. OGI Video Image Log and Videos
8. Well Site Fugitive Emissions Monitoring Plan, 40 CFR Part 60, Subpart OOOOa.